

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands)	WT Docket No. 03-66 RM-10586
)	
Part 1 of the Commission's Rules – Further Competitive Bidding Procedures)	WT Docket No. 03-67
)	
Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service to Engage in Fixed Two-Way Transmissions)	MM Docket No. 97-217
)	
Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico)	WT Docket No. 02-68 RM-9718

COMMENTS OF EARTHLINK, INC.

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EXECUTIVE SUMMARY

EarthLink, Inc. (“EarthLink”) applauds the Commission’s release of the *Notice of Proposed Rulemaking* (“NPRM”) in this proceeding, and urges immediate adoption of the proposal submitted by The Wireless Communications Association International, Inc., the National ITFS Association, and the Catholic Television Network (hereinafter the “Coalition Proposal”) for a new bandplan and other regulatory reforms for Multipoint Distribution Service (“MDS”) and Instructional Television Fixed Service (“ITFS”) spectrum. EarthLink believes that the Coalition Proposal is the most effective means of creating a viable wireless broadband “pipe” capable of giving independent Internet Service Providers (“ISPs”) and their customers choices not available under the existing cable modem/DSL duopoly.

EarthLink is the third largest Internet service provider (“ISP”) in the United States, offering dial-up, broadband, web hosting and wireless Internet services to 5 million subscribers nationwide. The company has undertaken a comprehensive effort to develop a nationwide broadband “footprint,” and already has nearly 1 million broadband subscribers. However, unlike the carriers and educators who will comprise most of the parties commenting in this proceeding, EarthLink, as an independent ISP, must rely on access to facilities-based networks operated by others to deliver broadband service to its subscribers. Hence, EarthLink’s objectives for this proceeding are twofold: (1) implementation of a regulatory environment that promotes multiple broadband pipes and, consequently, a marketplace in which EarthLink can acquire wholesale transport capacity from facilities-based carriers at competitive rates; and (2) adoption of Commission rules that promote the development of robust, reliable networks, thereby permitting EarthLink to deliver the highest quality of broadband service to its subscribers.

Adoption of the Coalition Proposal will achieve both objectives. Most important, the Proposal discards the Commission’s antiquated broadcast-like regulatory model for MDS/ITFS in favor of a Part 27-like approach that permits entry by multiple carriers using different technologies. The Coalition Proposal accomplishes this by (1) segmenting the 2500-2690 MHz band in a manner that permits low power cellularized services using multiple technologies to peacefully co-exist with the traditional high-power, high-site video services that MDS/ITFS incumbents have been providing for years; (2) incorporating a geographic licensing and application scheme that permits quick deployment of MDS/ITFS spectrum for new services with a minimum of Commission oversight and paperwork; (3) utilizing a market-by-market transition scheme designed to ensure that the new bandplan is implemented first in markets where new MDS/ITFS services are in greatest demand; and (4) revising Commission performance requirements in a manner that permits MDS/ITFS licensees to transition their facilities smoothly to the new bandplan, without undue risk of license forfeiture or non-renewal.

EarthLink also believes that the Commission can and should accelerate deployment of MDS/ITFS networks by permitting educators to assign their ITFS spectrum outside the middle band segment (“MBS”) to commercial interests after completion of an ITFS “white space” auction in which only ITFS eligibles can participate. In making this proposal, EarthLink is *not* suggesting that the ITFS allocation is unnecessary or that the ITFS service does not provide valuable educational services to students – to the contrary, history has shown that the ITFS spectrum can be an essential resource for many educators. However, the amount of ITFS spectrum required to provide educational services will vary from market to market, and educators, not the Commission, are best qualified to determine how much spectrum they need.

Providing ITFS licensees with the option, at their sole discretion, to assign licenses for channels outside the MBS rather than merely lease the capacity of those channels to commercial interests may prove critical to achievement of the Commission's objectives. While it is true that an educator may lease all of the capacity of the non-MBS channels for commercial use (its retention of an MBS channel more than satisfies the 5% reservation rules), some ITFS licensees may determine that local educational needs are better met by an assignment of the license for those channels and use of the proceeds to meet more significant educational requirements. Moreover, the capital markets are more likely to fund the massive infrastructure required to provide ubiquitous broadband service in the 2.5 GHz band, and ISPs like EarthLink are more likely to place their subscribers on 2.5 GHz networks, if they have the certainty that the capacity will be available for a term far longer than the maximum permitted ITFS lease term of 15 years.

Furthermore, under no circumstances should the Commission permit any unlicensed use of MDS/ITFS spectrum at this time, whether in ITFS white space or as an "underlay" of existing MDS/ITFS licenses. Simply put, the Commission knows very little about the interference implications of unleashing unlicensed devices into licensed spectrum, and now clearly is not the time for the Commission to use MDS/ITFS as a trial balloon for the concept. To do so would inject an unacceptable level of risk into MDS/ITFS deployment, chilling meaningful investment and deterring EarthLink and other ISPs from placing their subscribers on interference-prone MDS/ITFS spectrum.

Finally, EarthLink agrees with the Commission's analysis in the *NPRM* that the broadband internet market is very highly concentrated. The Commission's rules in this proceeding should be designed to promote the use of MDS and ITFS spectrum as a viable broadband "pipe" to residential and business consumers. As a result, it is appropriate for the Commission to limit or prohibit ownership by cable operators and incumbent local exchange carriers (ILECs) of MDS and ITFS spectrum that overlaps their cable franchise areas or local exchange service areas, respectively. There is ample support for such a cross ownership ban on both statutory and policy grounds. Cable modem service and DSL provided by the incumbent cable operator and the ILEC account for over 90% of the residential broadband service that is or will be available to consumers for the foreseeable future. Sections 613 and 652 of the Communications Act demonstrate a clear intent by Congress to encourage competition by prohibiting incumbents from purchasing or controlling alternative facilities that could be used to provide competing services in the same geographic area. The Commission should not waive the application of section 613(a) for any cable operator, and should apply a cross ownership restriction to all cable operators and ILECs with respect to all MDS and ITFS spectrum that overlaps the local service areas of those incumbent facility owners.

The Commission's own analysis also shows that a cross ownership ban is appropriate on policy grounds. As discussed in the *NPRM*, the Commission's information indicates that the Herfindahl-Hirschman Index (HHI) for the "typical broadband internet market" ranges from 4500 to more than 6000. Even in the case of an ILEC with only 31% of the broadband internet market in its incumbent service territory, the purchase of the MDS and ITFS spectrum would likely result in an increase of more than 2% of the market for that DSL provider, with the result that the acquisition of that spectrum would presumptively be anti-competitive under the *Horizontal Merger* Guidelines of the Department of Justice and Federal Trade Commission. As a result, a cross ownership restriction would be clearly justified on policy grounds.

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Amendment of Parts 1, 21, 73, 74 and 101 of the)	WT Docket No. 03-66
Commission's Rules to Facilitate the Provision of)	RM-10586
Fixed and Mobile Broadband Access, Educational)	
and Other Advanced Services in the 2150-2162 and)	
2500-2690 MHz Bands)	
)	
Part 1 of the Commission's Rules – Further)	
Competitive Bidding Procedures)	WT Docket No. 03-67
)	
Amendment of Parts 21 and 74 to Enable Multipoint)	
Distribution Service and the Instructional Television)	MM Docket No. 97-217
Fixed Service to Engage in Fixed Two-Way)	
Transmissions)	
)	
Amendment of Parts 21 and 74 of the Commission's)	
Rules With Regard to Licensing in the Multipoint)	
Distribution Service and in the Instructional)	WT Docket No. 02-68
Television Fixed Service for the Gulf of Mexico)	RM-9718

COMMENTS OF EARTHLINK, INC.

EarthLink, Inc. ("EarthLink") hereby submits its comments in response to the Commission's *Notice of Proposed Rulemaking* ("NPRM")¹ in the above-captioned proceeding. For the reasons set forth below, EarthLink asks the Commission to expeditiously adopt the bandplan and associated rule modifications proposed by The Wireless Communications

¹ *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, 18 FCC Rcd 6722 (2003).

Association International, Inc., the National ITFS Association and the Catholic Television Network (collectively, the “Coalition”). EarthLink believes that immediate implementation of the Coalition’s October 7, 2002 proposals (the “Coalition Proposal”), coupled with the additional recommendations set forth below, will establish Multipoint Distribution Service (“MDS”) and Instructional Television Fixed Service (“ITFS”) spectrum as an essential “third pipe” for a broadband marketplace that remains overwhelmingly dominated by incumbent cable modem and Digital Subscriber Line (“DSL”) services.

I. INTRODUCTION.

EarthLink is the nation’s third largest Internet Service Provider (“ISP”), serving 5 million customers nationwide with dial-up, broadband, web hosting and wireless internet services. As to broadband, EarthLink is “platform agnostic”, providing high-speed Internet access through cable, DSL and satellite. Today the company has nearly 1 million broadband subscribers across the United States, with DSL being the primary means of transmission.

Unlike the facilities-based carriers and educators who will comprise most of the commenting parties in this proceeding, EarthLink seeks to develop a nationwide broadband “footprint” by acquiring wholesale transport capacity on high-speed networks. EarthLink’s broadband business model thus requires a fully competitive marketplace in which the company can acquire wholesale capacity on multiple, technically reliable platforms on reasonable rates, terms and conditions. That competitive marketplace, unfortunately, does not exist today – as the Commission observes in the *NPRM*, the broadband market is “very highly concentrated,”² with

² *Id.* at 6774.

incumbent cable modem and DSL services accounting for well over 90% of all broadband service in the United States.³ Further aggravating the problem for EarthLink is the refusal by virtually all of the major cable MSOs to open their networks to EarthLink and other independent ISPs.⁴

Simply stated, the dominance of the incumbent wired broadband duopoly (and its anticompetitive effects on independent ISPs) will continue for the foreseeable future unless and until the Commission acts quickly to promote a viable third “broadband” pipe through wireless. EarthLink therefore enthusiastically endorses Chairman Powell’s call for an environment in which the current “trickle” of wireless broadband service “can become a rushing torrent, raging over and through obstacles to provide vital competition and reach unserved homes and communities.”⁵ The Coalition Proposal is the optimal vehicle for achieving the Chairman’s objective and, if adopted, will create a new regulatory paradigm that will finally give EarthLink

³ See “High-Speed Services for Internet Access: Status as of December 1, 2002,” Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Tables 1 and 2 (June 2003).

⁴ See, e.g., *Ex Parte* Presentation of EarthLink, Inc., CS Docket No. 02-52 and CC Docket No. 02-33, at 17 (filed Aug. 7, 2003) (“[T]he record in this proceeding demonstrates that the years of *de facto* forbearance by the Commission with respect to imposing common carrier requirements on cable operators providing cable modem service have not resulted in a competitive market. In fact, just the opposite has occurred. The top providers of broadband Internet access service are all affiliated with or owned by facility operators, while the vast majority of ISPs in the United States are unable to provide broadband services to consumers because they are unable to get transmission services on reasonable terms and conditions, if they can get them at all.”). EarthLink’s efforts to develop a nationwide broadband “footprint” also is threatened by ongoing uncertainty over the regulatory classification of broadband and the concomitant obligations of cable multiple system operators and local exchange carriers to open their networks to unaffiliated ISPs. See Testimony of David N. Baker, Vice President of Law and Public Policy, EarthLink, Inc., Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, United States House of Representatives, “The Regulatory Status of Broadband Services: Information Services, Common Carriage or Something in Between?” (July 21, 2003).

⁵ Powell, “FCC Wireless Spadework in ’02 to Bear Fruit in ’03,” *RCR Wireless News*, at 14 (Mar. 17, 2003).

and other independent ISPs a viable wireless option for delivering new broadband-based services both locally and nationwide, to the ultimate benefit of consumers.

II. DISCUSSION.

A. The Coalition Bandplan and Associated Rule Modifications Are the Most Effective Means of Promoting Near-Term Deployment of MDS/ITFS Spectrum for Broadband Service.

As pointed out by Chairman Powell, the Commission's current regulatory regime has stifled the deployment of MDS/ITFS spectrum for broadband.⁶ The Coalition Proposal was designed precisely to eliminate that problem:

[T]he MDS/ITFS broadband industry continues to evolve to meet consumer demand and educational needs for innovative new services, and the Commission's rules must keep pace. However well-intentioned, the rules and policies adopted by the Commission in 1998 to govern MDS/ITFS two-way services have proven too restrictive to meet the needs of the marketplace in 2002 and beyond. If not substantially modified, the current licensing regime of Parts 21 and 74 will effectively preclude commercial operators and educators from taking advantage of the substantial opportunities that next generation MDS/ITFS technology offers for the provision of commercial services and educational applications.⁷

Fundamentally, EarthLink has two concerns which it believes are addressed by the Coalition Proposal. First, as discussed above, the success of EarthLink's broadband service depends heavily on full and fair access to facilities-based networks at competitive wholesale

⁶ See Separate Statement of Chairman Michael K. Powell re: *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands (RM-10586)* (Mar 13, 2003) ("The 2.5 GHz band has labored for years under the heavy hand of command-and-control regulation. The regime has not served the American people or the Commission's licensees particularly well. Our rules have, at times, been complex and stifling, and have shifted in their objectives – from promoting competition in the MVPD market to offering rural broadband solutions.") ("Powell Statement").

rates. To date, however, there essentially are only two available means of delivering broadband service, cable modem and DSL, and the former has been largely unavailable to independent ISPs due to the refusal by cable MSOs to make their networks available to non-affiliated ISPs.

Significantly, the Coalition Proposal *lowers* barriers to entry by establishing a more rational regulatory scheme for MDS/ITFS, thereby promoting the deployment of broadband networks at 2.5 GHz and giving independent ISPs and their customers a legitimate alternative to the cable modem/DSL duopoly. The net result, EarthLink believes, will be a more competitive and balanced broadband marketplace at both the wholesale and retail levels. Indeed, this was the basic public interest rationale for the Commission's 1997 decision to amend its rules to permit MDS/ITFS operators to deliver two-way broadband services:

The rules we adopt today will also provide significant benefits to consumers. A new, competitive group of players will now enter the market for high speed two-way communications service. Both individual and business consumers will be able to use the high-speed and high-capacity data transmission and Internet service that will be available through the new systems. Also, consumers will be able to take advantage of new video-conferencing, distance learning and continuing education opportunities. Commenters have also suggested cutting edge applications like tele-medicine for the new two-way systems. Most importantly from a consumer perspective, there will be another choice of provider for these services, helping to drive down the costs in a more competitive market.⁸

Second, it is absolutely imperative that the Commission's technical rules promote the development of robust, interference-free wireless services that permit EarthLink to deliver the highest quality of broadband service to its customers at all times. EarthLink and other users of

⁷ "A Proposal for Revising the MDS and ITFS Regulatory Regime," Wireless Communications Ass'n Int'l, National ITFS Ass'n, and the Catholic Television Network, RM-10586, at 10 (filed Oct. 7, 2002) ("Coalition Proposal").

⁸ *Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112, 19116-7 (1998)(footnote omitted) ("*Two-Way Report and Order*").

wireless broadband networks cannot operate with anything less, since wireless broadband subscribers will not tolerate network shutdowns, signal interruptions or other interference-related degradations of service. Instead, they will turn to incumbent cable modem and DSL providers who do not operate with a material risk of radiofrequency interference. That, obviously, is exactly the result the Commission is attempting to avoid in the *NPRM*.

EarthLink believes that the key components of the Coalition Proposal more than adequately address its concerns discussed above. *First*, by segmenting the 2500-2690 MHz band into lower and upper band segments (the “LBS” and “UBS,” respectively) for lower power, cellularized services and a middle band segment (the “MBS”) for the traditional ITFS high-power, high-site services, the Coalition Proposal both provides substantial spectrum for the delivery of broadband services (at least 132 MHz) and provides an environment in which the two very different types of services will avoid interfering with each other.⁹ Although EarthLink does not envision that it would utilize high-power, high-site facilities for serving its own subscribers, it appreciates that there appears to be a continuing need among some educators for such facilities. While EarthLink does not oppose setting aside spectrum for high-power, high-site ITFS operations, separation of high-power, high-site services from cellular services along the lines suggested by the Coalition is critical to establishing the interference-free environment that EarthLink must provide to its customers.

Second, given that consumer demand and technologies are evolving, the Commission should adopt rules that will facilitate multiple entrants and that will accommodate the use of different technologies by those multiple entrants. The technical rules advanced in the Coalition

⁹ See Coalition Proposal at 12-19.

Proposal accomplish those objectives. Although the proposed technical/interference protection rules are more complex than in other services, such complexity appears essential to provide system operators with certainty that they can deploy economically-viable systems without fear of future interference. The Coalition Proposal permits a wide diversity of services using either Frequency Division Duplex (“FDD”) or Time Division Duplex (“TDD”) technologies, and proposes technical rules that allow licensees to freely switch between those technologies over time, without causing harmful interference.¹⁰ Adoption of these proposals will result in an interference-free environment, while assuring that EarthLink and other ISPs, through their network operators, can quickly respond to technological innovations and ever-changing marketplace conditions.

Third, the Coalition Proposal discards the Commission’s broadcast-style regulatory model for MDS/ITFS and relies instead on a Part 27-like regulatory scheme for the LBS and UBS, grounded in geographic licensing, minimization of application paperwork and imposition of only those technical rules that are necessary to minimize harmful interference between co-channel and adjacent channel users.¹¹ The result will be a more significant reduction in transaction costs for licensees and their customers than is possible under the current MDS/ITFS regulatory regime, which should minimize wholesale pricing and provide EarthLink and other ISPs incentive to place subscribers on MDS/ITFS networks.

Fourth, the transition procedures suggested in the Coalition Proposal (which to date have enjoyed substantial support within the MDS/ITFS community) will provide for the fastest

¹⁰ See Coalition Proposal at 12-19.

¹¹ See *id.* at 19-30.

possible transition in markets where system operators are ready to deploy new services in accordance with the new bandplan.¹² Transitions can occur in a matter of months under Coalition Proposal, even where one or more licensee is not entirely cooperative. By comparison, the alternative processes proposed in the *NPRM* that are more closely based on the Commission's microwave relocation rules could actually take far longer in many markets, since the Commission historically has provided for voluntary and involuntary negotiation periods that can stretch out for two years or more. In addition, the Coalition's transition plan efficiently permits immediate transitions in those markets where demand for new services is greatest, allowing licensees to reinvest profits earned from those markets to fund transitions in other markets at a later time. Given the capital constraints facing even the largest wireless system operators, the importance of this consideration cannot be ignored.¹³

Fifth, The Coalition Proposal advances revised performance requirements designed to facilitate the transition of MDS/ITFS to broadband services in a manner that is consistent with the Commission's rules for other flexible use wireless services.¹⁴ EarthLink endorses the

¹² *See id.*, Appendix B.

¹³ The Commission requests comment on whether it should forego the Coalition's transition plan and instead make both licensed and unlicensed MDS/ITFS spectrum available via two-side auctions, on the theory that a two-sided auction may be a more efficient method of consolidating MDS/ITFS spectrum into the hands of those most likely to deploy it for new services. *See NPRM*, 18 FCC Rcd 6821-2. EarthLink opposes this proposal. First and foremost, the MDS/ITFS industry is already well-consolidated – as the Commission is already aware, a relatively small number of commercial entities hold rights to MDS/ITFS licenses covering a substantial majority of the country. Moreover, the Commission cannot overlook the fact that much of the ITFS spectrum is already leased to commercial entities and thus would not be available for auction in any case. The integrity of the ITFS leasing process and a myriad of other legal, economic and logistical issues cited in the *NPRM* render two-sided auctions an unnecessary and inferior choice for effectuating a smooth transition of the MDS/ITFS industry to the new regulatory regime.

¹⁴ *See* Coalition Proposal at 43-50; *cf.* Remarks of Michael K. Powell, Chairman, Federal Communications Commission, at the Broadband Technology Summit, U.S. Chamber of Commerce, (continued on next page)

Coalition’s call for the Commission to replace its current MDS/ITFS build-out requirements with a “substantial service” test at renewal time coupled with “safe harbors” (currently used for virtually all other flexible use wireless services), and to apply that test in a manner that reflects the need for 2.5 GHz system operators to cobble together spectrum from a variety of licensees.¹⁵ In addition, the Commission should adopt the proposals advanced by the Coalition that assure that current MDS/ITFS licensees are not discouraged from converting to new broadband service offerings because of upcoming renewal deadlines. A substantial service test that encourages licensees to continue their obsolete video services until after current licenses are renewed ultimately serves neither EarthLink’s interest nor the public interest. The better approach is that suggested by the Coalition – afford a renewal expectancy to any licensee that has provided substantial service during its license term, and thereby encourage licensees to immediately commence the transition to broadband regardless of whether they will be sufficiently along in the transition process to qualify for license renewal under the traditional substantial service test.

Washington, D.C. (Apr. 30, 2002) (noting that “[t]he convergence of industries, where advanced networks allow entities in traditionally distinct market segments to enter into each other’s markets and into new similar markets, demands that we rationalize our regulatory regime to address these changes”).

¹⁵ As discussed in the Coalition Proposal, adoption of a substantial service test at renewal will serve the dual objectives of maintaining oversight over a licensee’s performance during the license term while recognizing that some channels may necessarily lie fallow at any given point during the license term, either due to transition or other operational factors that do not bear on overall licensee performance (this would apply for example, where channels are used as guardbands or are held in reserve to accommodate future expansion of service).

B. The Commission Can and Should Accelerate MDS/ITFS Broadband Deployment By Giving ITFS Licensees The Option to Assign Their Non-MBS Spectrum To Commercial Interests.

The Commission requests comment on whether ITFS licensees should be permitted to sell their spectrum to commercial interests.¹⁶ EarthLink believes that affording ITFS licensees the option, at their sole discretion, of assigning their non-MBS spectrum to commercial interests would both address pressing local educational needs and accelerate the deployment of 2.5 GHz band broadband services.

It must be emphasized that EarthLink is *not* suggesting that the ITFS allocation is unnecessary or that the ITFS service does not provide valuable educational services to students – to the contrary, history has shown that the ITFS spectrum can be an essential resource for many educators.¹⁷ Thus, EarthLink would not involuntarily strip spectrum from any ITFS licensee, and adoption of its proposal would assure that at least 30 MHz, and as much as 42 MHz in many markets, would always remain ITFS spectrum.

As the Commission has recognized for some time, however, the amount of ITFS spectrum required to meet local demand for educational services will vary from market to market, and educators, not the Commission, are best qualified to determine how much of their spectrum should be used for educational versus commercial purposes:

¹⁶ See *NPRM*, 18 FCC Rcd at 6771.

¹⁷ See, e.g., Powell Statement (“Despite the uncertainty caused by these regulatory shifts, many licensees have strived to provide innovative and quality services. In particular, some ITFS licensees have conscientiously provided valuable educational opportunities and services to the communities they serve.”).

In light of the varied market strategies that different wireless cable operators will implement in a digital environment, and likewise in light of the broad range of educational uses to which different ITFS licensees will seek to devote their channels, it is not a simple matter to arrive at a "one size fits all" approach towards minimum ITFS educational usage requirements and reservation of spectrum solely for instructional purposes, whether immediate or future. Therefore, because we seek to maximize the flexibility of educators and wireless cable operators to design systems which best meet their varied needs, we will adopt ITFS excess capacity leasing rules which best promote this flexibility while at the same time safeguarding the primary educational purpose of the ITFS spectrum allocation.¹⁸

With this in mind, coupled with the fact that ITFS licensees are already permitted to lease up to 95% of their capacity for commercial use, EarthLink submits that it makes no sense for the Commission to prohibit ITFS licensees from assigning their non-MBS spectrum to commercial operators. A licensee that assigns its 18 MHz of non-MBS spectrum and retains 6 MHz in the MBS for its own use may well provide more educational programming than it currently provides, particularly if it utilizes the proceeds from the spectrum sale to fund new educational television facilities or otherwise support its educational efforts.¹⁹

Allowing commercial operators to acquire non-MBS spectrum from ITFS licensees will not only provide additional funding to meet local educational needs, but it will promote the most rapid possible deployment of broadband facilities using the LBS and UBS channels. The inescapable reality is that system operators and the capital markets are far more likely to invest the billions of dollars it will take to construct a nationwide 2.5 GHz band infrastructure if system operators can own their own spectrum and avoid the risks associated with leasing. This is a

¹⁸ *Two-Way Report and Order*, 13 FCC Rcd 19159 (footnotes omitted); *see also id.* at 19161-2.

¹⁹ Indeed, the Commission has allowed the sale of a non-commercial television channel where it found that the proceeds were likely to improve the programming service of a second non-commercial television channel serving the same community. *See Amendment of the Television Table of Allotments to Delete Noncommercial Reservation on Channel 16, 482-288 MHz (Pittsburgh, PA)*, 17 FCC Rcd 14038 (2002).

critical consideration since, as noted by Chairman Powell, “[r]evolutions and infrastructure buildouts take time,”²⁰ and the 15-year maximum ITFS lease term permitted by the Commission is a relatively short span of time in the life of a facilities-based network.²¹ Hence, by allowing commercial operators to acquire non-MBS spectrum if an ITFS licensee is agreeable, the Commission can increase the likelihood that broadband facilities will be deployed in the LBS and the UBS.

Finally, to achieve the appropriate balance between maximizing the use of ITFS spectrum for educational use and promoting commercial broadband deployment, EarthLink recommends that the Commission limit eligibility for the first ITFS white space auction to current ITFS “eligibles,” *i.e.*, accredited educational entities, governmental entities engaged in the formal education of enrolled students, or non-profit organizations that provide educational programming to accredited educational entities. This will assure that potential ITFS licensees have one last full and fair opportunity to secure the spectrum they need to serve local education needs. Only thereafter should the Commission permit any ITFS licensee to sell its non-MBS spectrum to a commercial operator if it so chooses. However, if any ITFS white space spectrum remains after the auction, the Commission should make that spectrum available through a second auction in which commercial operators would be eligible to participate. Collectively, these measures

²⁰ Remarks of Michael K. Powell, Chairman, Federal Communications Commission, at the Broadband Technology Summit, U.S. Chamber of Commerce, Washington, D.C. (Apr. 30, 2002)

²¹ It also should be noted that many existing ITFS leases are in the middle or near the end of their 15 year term, so as a practical matter many commercial operators do not have the benefit of a full 15 year term in any case, and thus must build out their facilities with an even higher level of uncertainty over the status of their leased channels.

ensure that all educational interest in the ITFS spectrum is exhausted before commercial operators may acquire it.

C. The Commission Should Not Put Potential Investments by EarthLink and Others At Risk By Permitting Unlicensed Use of MDS/ITFS Spectrum or Increasing its Minimum ITFS Programming Requirements.

In the *NPRM* the Commission requests comment on whether it should permit unlicensed use of ITFS spectrum in white space areas,²² and even on whether it should even go so far as to permit unlicensed devices to “underlay” licensed MDS/ITFS spectrum.²³ EarthLink urges the Commission to do neither at this time.

As noted by the Spectrum Policy Task Force, “a level of certainty regarding one’s ability to continue to use spectrum, at least for some foreseeable period, is an essential prerequisite to investment, particularly in services requiring significant infrastructure and lead time.”²⁴ That is true of MDS/ITFS – the Commission should not expect facilities-based carriers or wholesale users such as EarthLink to seriously consider relying on MDS/ITFS spectrum for broadband service if they have no certainty that the underlying network will be protected from harmful interference. Plainly, however, such certainty would be lost if the Commission were to permit unlicensed use of MDS/ITFS spectrum as proposed in the *NPRM*.

In the case of ITFS white space, substantial uncertainty would result from the fact that the Commission has yet to develop an effective means of controlling when and where unlicensed

²² See *NPRM*, 18 FCC Rcd at 6755-6.

²³ See *id.* at 6782-3.

devices operate. This logically arises from the fact that, unlike the case with licensed services, the focal point of regulation in unlicensed services is the equipment, not the user (in other words, so long as an unlicensed device is certified as required under the Commission's Rules, it may transmit signal in virtually any area of the country). While the *NPRM* suggests that GPS or other technology may be employed to limit the operation of unlicensed devices solely to the ITFS white space, that technology is far from proven. As a result, MDS/ITFS networks and those who acquire wholesale capacity on them would be forced to operate under a constant threat that unlicensed users will operate outside of ITFS white space, and will have little recourse before the Commission.

Similarly, the Commission will chill investment in MDS/ITFS technology if it permits unlicensed "underlays" on licensed MDS/ITFS spectrum. While the concept of unlicensed underlays has been the subject of much discussion both in the Spectrum Policy Task Force and other ongoing Commission proceedings, to date there is no evidence that unlicensed devices can operate underneath licensed MDS/ITFS spectrum without causing harmful interference to MDS/ITFS licensees. Until such evidence exists, the Commission should not use MDS/ITFS as a test case for the concept. An experimental foray into unlicensed underlays would compromise the billions of dollars MDS/ITFS licensees and channel lessees have already spent to acquire licenses and prepare MDS/ITFS for broadband service, and could quell any future interest in the band by potential investors, service providers and large wholesale customers such as EarthLink.

In sum, by virtue of the Coalition Proposal and the *NPRM*, the Commission is finally on the verge of according MDS/ITFS a regulatory scheme that will unleash its vast potential as a

²⁴ Report of the Spectrum Policy Task Force Report, Federal Communications Commission, ET Docket (continued on next page)

vehicle for broadband service. Patently, now is not the time to reverse those gains by burdening MDS/ITFS licensees with the threat of potentially unlimited interference from unlicensed operations which the Commission knows very little about.²⁵ From a customer relations perspective, this is not an acceptable risk of doing business, particularly for service providers attempting to compete in a broadband marketplace already dominated by wired incumbents that do not need to fear such interference. Broadband services are far more likely to develop in the 2.5 GHz band if ITFS spectrum is available exclusively on a licensed basis in all markets, so as to eliminate any risk of harmful interference from wayward unlicensed operations.²⁶

D. The Commission Should Limit the Eligibility of Incumbent Cable Modem and DSL Providers To Acquire Rights to MDS/ITFS Spectrum.

EarthLink agrees with the Commission's analysis in the *NPRM* that the "broadband internet market is very highly concentrated."²⁷ The Commission's own information supports this conclusion, as do industry statistics.²⁸ As EarthLink has demonstrated in numerous filings in other proceedings before the Commission, cable operators are generally unwilling to provide

No. 02-135, at 23 (Nov. 2002).

²⁵ Also, contrary to what the Commission suggests in the *NPRM*, unlicensed underlays are by no means necessary to stimulate innovation in wireless services. There is no reason why licensed MDS/ITFS operators cannot provide Wi-Fi and other Part 15 services in the bands allocated for those services – indeed, unlicensed underlays on MDS/ITFS spectrum may actually *stifle* innovation by preventing MDS/ITFS licensees from developing innovative services that cannot coexist with unlicensed underlay services.

²⁶ Furthermore, as a practical matter, vendors are unlikely to be enthusiastic about building unlicensed equipment for ITFS white space, as there is very little of it available, and what is available consists almost entirely of sparsely populated areas.

²⁷ See *NPRM* at ¶123.

²⁸ See *id.* and accompanying footnotes.

access to their networks to EarthLink and other independent ISPs,²⁹ and the ILECs are presently seeking relief from the legal obligation to provide wholesale broadband transport service upon reasonable terms and conditions.³⁰ The Commission's rules in this proceeding should be designed to promote the use of MDS and ITFS spectrum as a viable broadband "pipe" to residential and business consumers. As a result, it is appropriate for the Commission to limit or prohibit ownership by cable operators and incumbent local exchange carriers (ILECs) of MDS and ITFS spectrum that overlaps their cable franchise areas or local exchange service areas, respectively.

There is ample support for such a cross ownership ban on both statutory and policy grounds. Cable modem service and DSL provided by the incumbent cable operator and the ILEC account for over 90% of the residential broadband service that is or will be available to consumers for the foreseeable future. There can be no question that allowing a cable operator or ILEC to own or control MDS or ITFS spectrum that would otherwise be used by a competitor to provide a "third pipe" competing broadband service within the cable operator or ILEC's service area will substantially lessen competition. To guard against such a reduction of competition, Congress in the amendments made by the Telecommunications Act of 1996 left in place existing provisions and included new provisions to prevent the anti-competitive effects that occur when an incumbent is able to purchase or control alternative facilities that a competitor might use to compete with the incumbent's service. In 1996, Congress left in place the cross ownership

²⁹ See *supra*, note 3. See also Comments of EarthLink, Inc., CS Docket 02-52, at 7 (filed June 17, 2002).

³⁰ See, e.g., *In the Matter of Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, Notice of Proposed Rulemaking, CC Docket 01-337 (released December 20, 2001) and *In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Notice of Proposed Rulemaking, CC Docket 02-33 (released February 15, 2002).

restriction in Section 613(a) of the Communications Act that in general prohibits a cable operator from owning an MMDS system.³¹ Further Congress added Section 652 of the Communications Act to prohibit a local exchange carrier from purchasing a cable network that serves the same area and prohibit the cable operator from purchasing a local exchange network that serves the same area.³² Both of these statutory provisions demonstrate a clear intent by Congress to encourage competition by prohibiting incumbents from purchasing or controlling alternative facilities that could be used to provide competing services in the same geographic area. The Commission should not waive the application of section 613(a) for any cable operator, and should apply a cross ownership restriction to all cable operators and ILECs with respect to all MDS and ITFS spectrum that overlaps the local service areas of those incumbent facility owners.

The Commission's own analysis also shows that a cross ownership ban is appropriate on policy grounds. As discussed in the *NPRM*, the Commission's information indicates that the Herfindahl-Hirschman Index (HHI) for the "typical broadband internet market" ranges from 4500 to more than 6000.³³ According to the *Horizontal Merger Guidelines* issued by the Federal Trade Commission and the Department of Justice, markets in which the HHI is in excess of 1800 points are considered to be highly concentrated, and transactions that increase the HHI by more than 100 points in highly concentrated markets presumptively raise antitrust concerns.³⁴ Even in the case of an ILEC with only 31% of the broadband internet market in its incumbent service

³¹ See 47 U.S.C. 533(a).

³² See 47 U.S.C. §572.

³³ See *NPRM* at ¶¶123-124.

³⁴ See 1992 Horizontal Merger Guidelines, U.S. Department of Justice and the Federal Trade Commission, §1.51 (available at http://www.usdoj.gov/atr/public/guidelines/horiz_book/15.html)(visited September 5, 2003).

territory, the purchase of the MDS and ITFS spectrum would likely result in an increase of more than 2% of the market for that DSL provider, with the result that the acquisition of that spectrum would presumptively be anti-competitive under the *Horizontal Merger Guidelines*.³⁵ As a result, a cross ownership restriction would be clearly justified on policy grounds.

III. CONCLUSION.

EarthLink is confident that the record in this docket will reaffirm that the Coalition Proposal is the most sensible plan for regulatory reform of the MDS/ITFS industry. Most important, the Coalition Proposal permits users of MDS/ITFS spectrum to deploy the widest possible variety of services demanded by consumers, with a minimum of regulatory oversight, paperwork and administrative delay. If implemented properly, the Coalition Proposal will produce a more robust, economically viable wireless broadband “pipe” capable of competing effectively with incumbent cable modem and DSL services. In turn, independent ISPs and their customers will be afforded choices in the marketplace that they do not have now and will not have for the foreseeable future if the Commission does not act on the Coalition Proposal quickly. EarthLink therefore urges the Commission to adopt the Proposal as soon as possible in accordance with the comments set forth above.

³⁵ The HHI for a market with an incumbent cable operator providing 65% of the broadband internet service and the ILEC providing 31% of the broadband internet service using DSL would go from an HHI of 5186 to an HHI of 5314, an increase of 128 points, if the DSL provider’s market share increased by 2% to 33%.

Respectfully submitted,

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